King & MacGregor
Environmental
Inc.

April 16, 2010

Sent Via E-mail and UPS

Ms. Melanie Haveman
United States Environmental Protection Agency, Region 5 (WW-16J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: Michigan DNRE File No. 09-52-0086-P
Woodland Road, LLC

Dear Ms. Haveman:

Woodland Road, LLC ("Woodland") is in receipt of your letter dated March 17, 2010, to Colleen O'Keefe of the Michigan Department of Natural Resources and Environment ("MDNRE"). Your letter provides comments on Woodland's application for permit ("Application") under Parts 301 and 303 of the Michigan Natural Resources and Environmental Protection Act ("NREPA") to fill certain wetlands and construct stream crossings in conjunction with development of the Woodland Road between US-41 and the Triple A Road in Marquette County, Michigan. Woodland desires to work cooperatively with you to resolve your comments and objections to the Application. To that end, Woodland responds to your comments below:

I. Alternatives Analysis

A. The Project Purpose Definition Provided in the Permit Application is an Accurate Statement of the Basic Purpose of the Woodland Road that does not Prejudice any of the Alternatives Analyzed

The project purpose stated in the Application is *"to construct a multi-purpose road to connect key industrial, commercial, and recreational areas in northwest Marquette County to US-41."* Both your letter and the Corps suggest that this statement in the Application is inaccurate, and further suggest that the Woodland Road's "main purpose" is to "haul ore" between the Kennecott Eagle Mine and the Humboldt Mill. This is incorrect.

The project purpose stated in the permit application reflects the varied interests of the LLC members as the permit applicant, as well as the public interests. The Corps position that this description is not "accurate" is a conclusion that ignores extensive information documenting the broader purpose of the road. Further, the stated project purpose does not prejudice any of the alternatives discussed in the Application, or those evaluated in more detail after the submittal of the Application. If proposed roads to serve new areas were held to a standard that suggests use of existing roads would cause less wetland impact, then new roads could never be permitted by the DNRE under Part 303.

The EPA's recharacterization of the project's main purpose as a road to "haul ore" is too limiting and therefore restricts the alternatives to be considered. If the proposed road was only to haul ore, then the road would be proposed as a private road on the shortest possible route to get from the mine site to the ore processing facility and only be a one-lane road, with turn-outs, and no access allowed by non-mining vehicles. Many other mines have such haul roads; however this type of single-purpose mining haul road is not proposed in this Application.

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1. The development of a multi-purpose road in northwest Marquette County will serve well-documented needs.

The northward extension of the existing Wolf Lake Road (a county road) to connect to Triple A Road is a project that has been discussed locally for many years. A lack of public funds to construct such a road and the inability of any other entity to provide the funding for such an undertaking (e.g. timber companies) has resulted in the project languishing. As stated in page two, paragraph two of an April 12, 2010 letter from the Board of County Road Commissioners for the County of Marquette signed by James M. Iwanicki, P.E., Engineer-Manager for the Road Commission, better access into northwest Marquette County has been a topic of discussion over the course of the past 12 years that Mr. Iwanicki has been Road Commission Engineer-Manager. This Road Commission letter is included in the Appendices to this letter.

Thus, the Kennecott Eagle Mine served as a catalyst to address a long-time need for a new road, as is evidenced by the varied interests of the Woodland Road LLC members themselves. In addition to Kennecott, the LLC members are: Michigan Forest Products Council, A. Lindberg & Sons, Inc., and John Jilbert. All of the LLC members have a substantial interest in the construction of a road connecting industrial, commercial, and recreation interests in northwest Marquette County to US-41.

Kennecott Eagle Minerals Company

When the Eagle Mine became a reality, the partnership to design and build such a road also became a reality. Once the financial resources of Kennecott Eagle Minerals Company ("KEMC") were offered and land access for the road was provided by the large timber companies, A. Lindberg & Sons, Inc. ("AL&S") offered its resources to design the road and provide critical lands. As all of these components came together, the long-needed road became possible.

The Eagle Mine and Humboldt Mill have been permitted by the State of Michigan. This new mine will positively impact the economy of the region as well as the State of Michigan for many years. The new high-skill jobs, taxes, royalties, and "trickle-down" effects of Eagle Mine on the economy are critically needed for a State that is highest in the nation in unemployment and suffering economically in staggering proportions.

KEMC has an available route for the Eagle Mine using the CR 550 route ("Alternative 2") that it will utilize if the Woodland Road is not built. However, the Woodland Road is a more efficient and direct route to transport ore from the Eagle Mine to the Humboldt Mill, and the road will address public preference to reroute mine trucks off of existing roads. The latter is addressed in more detail in another part of this response.

Forest Products Industry

The Michigan Forest Products Council is the lead trade organization representing the State's entire forest products industry including landowners, foresters, sawmills, and a large and diverse array of wood products manufacturers. The Council is widely recognized as the voice of the forest products industry in Michigan. In particular, Holli Forest Products, Longyear, Plum Creek and GMO are members directly interested in this project. The logging and forest products

industry is a large part of the economy of Michigan's Upper Peninsula and has been part of the heritage of the Upper Peninsula since settlement. The Council supports the Woodland Road because it will facilitate the efficient transportation of forest products as well as support the emerging biofuel industry which provides an opportunity to make beneficial use of products that are currently considered waste. Current infrastructure is not adequate to serve this newly emerging facet of the timber industry.

The Application provides information regarding the benefits of the proposed Woodland Road to the forest industry. Presently the timber harvested from the lands in the Project Service Area[1] are trucked to mills, railroad yards, or processing plants throughout the western Upper Peninsula. The timber company landowners and loggers that harvest State, Federal, and private lands in the area currently haul timber on substandard roads using indirect and inefficient routes, all of which negatively affect the efficiency of doing business. The Woodland Road will be a significant asset in regard to timber harvest and transportation and will positively affect the price landowners receive for timber and the economic viability of timber haulers.

The following comments have been submitted by the largest timber company landowners in the area of Marquette County that would be benefitted by the proposed Woodland Road. (The letters from which these comments are excerpted are included in the Appendices of this letter).

> Mark Sherman, Resource Supervisor for Plum Creek Timber Company, Inc. submitted a letter dated April 15, 2010 in support of the proposed Woodland Road. Mr. Sherman states in his letter, *"As presently defined, the proposed Woodland Road would service an estimated 45,000 acres of Plum Creek lands in Marquette and Baraga Counties, representing, on average, 900 trucks hauling 45,000 tons of wood per year. Of those 900 trucks, an estimated 230 presently travel through Marquette and another 200 travel through L'Anse. The Woodlands Road will eliminate that number of trucks traveling through these communities."* Mr. Sherman goes on to state that, *"The effect on reduced hauling distances is also significant, with hauls from portions of Plum Creek's ownership in Marquette County reduced by approximately 20 miles one-way, and from portions of our Baraga County ownership by approximately 50 miles one-way. Correspondingly, the total haul distance saved per year, for Plum Creek alone, would equate to ~29,200 miles, which at 4 MPG fuel consumption rate would save 7,300 gallons of fuel annually. Such statistics support the importance of this multi-purpose road not only on the basis of economic and public safety reasons, but from an environmental standpoint as well."*

> Art Abramson, Forest Lands Manager for J.M. Longyear, LLC submitted a letter to Mike Smolinski dated April 14, 2010 that provides explicit reasons why the proposed Woodland Road is very important to Longyear, to private landowners, and to the public that utilize Longyear lands. Mr. Abramson writes, *"The forest landowners who manage their forest to grow timber products; the loggers, truckers and road builders who do the work to bring*

[1] DNRE Application for Permit Alternatives Analysis, Figure 1, page 4.

those timber products to the mills; and the veneer mills, sawmills and paper mills who convert the logs and pulpwood into consumer products are a significant element of Marquette County, the Upper Peninsula, and Michigan as a whole. Maintaining a healthy forest products industry is imperative to both this region and the State; especially in light of the State-wide initiatives to rebuild and further diversify Michigan's economy. Any opportunity to improve efficiency, reduce costs, and increase competiveness, while assuring reasonable and prudent protection of the resources should be a top priority for both private business as well as all government entities. We should be seeking to improve the business environment as well as maintain the natural environment."

William A. Hennigan, representing Holli Forest Products, Inc., writes in his April 8, 2010 letter to Mike Smolinski of the DNRE, *"....if Woodland Road were in existence today, Holli Forest Products, Inc. would be sending approximately 300-400 trucks (one way) over that road this summer alone and probably that amount again during the summer of 2011 with our existing timber contracts."* Mr. Hennigan goes on to say, *"These truck volumes will be much higher when other timber companies are included. This proposed road would be utilized for large volumes of timber going south, west, and east from the terminus at US-41."*

Currently, a biofuel plant is under construction in Marquette County to produce biofuel pellets for blast furnaces, power generation, and other industrial applications. The biofuel pellets produced will substantially reduce greenhouse gas emissions compared to other fuels presently used (e.g. coal). By-products of timber harvest are important sources of raw material for biofuel. This new activity will result in additional traffic into and out of the forest lands accessed by the Woodland Road. Limbs and branches left over from timber harvests will be processed on-site and loaded into chipper van trailers. These 53-foot long enclosed trailers require more substantial roadways than do shorter log-hauling tandem trailers. In order to accommodate the chipper vans, some existing roads and trails will have to be upgraded. Harvest for biofuel plants will be a new activity that the Woodland Road will serve; providing year-round, convenient access to gather materials for biofuel plant processing. Biofuel production will occur with or without the Woodland Road and improvements will likely have to be made to the existing road and trail system to accommodate this new industry. The proposed Woodland Road provides a coordinated way to address this important need for reduced-emission fuel and the need for economic growth in the region.

The summary of the input provided by the timber industry is that the proposed Woodland Road is a long needed infrastructure improvement project to serve the timber industry in this region.

A. Lindberg & Sons, Inc.

The third member of the LLC is A. Lindberg & Sons, Inc. AL&S (nearly 100 years old) is a large, heavy construction and trucking company located in Ishpeming, Michigan. AL&S has been responsible for the engineering and planning of the proposed Woodland Road, in conjunction with KEMC and other project team members. AL&S is active in Marquette County producing aggregate, processed gravel, rock, limestone, and sand for projects throughout the Upper Peninsula.

Presently AL&S transports its products on many routes in Marquette County, and therefore concerns with heavy trucking in the City of Marquette, Negaunee, and Ishpeming are a factor in its business. The proposed Woodland Road would avoid more populated areas and conflicts with other users of the existing road. Presently AL&S transports approximately 10,000 tons of crushed stone (500 truck loads) for forest industry use in road maintenance and construction in the Project Service Area during the months of April to October.

AL&S has been engaged in the proposed Woodland Road project since the initial planning stages and has been instrumental in obtaining land easements, conducting geotechnical investigations, coordinating road design and surveying.

John Jilbert

The fourth member of the LLC is John Jilbert. Mr. Jilbert has been a businessman in the area for many years and owns substantial acreage of recreational land in northwest Marquette County. Although the proposed Woodland Road does not adjoin his lands, Mr. Jilbert has been a proponent of better access to the Silver Lake area for many years and joined the LLC to assist in this project.

In addition to serving varied commercial interests, the Woodland Road will provide important benefits to the general public.

Woodland Road would provide a needed second emergency access route to the northwest part of Marquette County. As stated in the previously April 12, 2010 letter from the Board of County Road Commissioners for the County of Marquette, (page three, paragraph two), the failure of any of the dams on the Dead River from Silver Lake Basin easterly to Lake Superior may cause bridge failures that cut off the Big Bay area and other areas of northwest Marquette County for emergency access. For example, the May 2003 failure of an earthen dam on the Silver Lake Basin caused the failure of the bridge on CR AAO, as well as the failure of the Tourist Park dam, and led to concerns for the other river crossings. As stated in the Road Commission letter, *"The Woodland Road would dramatically improve emergency access around the Dead River system of dams thereby increasing public safety to those areas north of the Dead River."* Thus, Woodland Road provides an alternative route to Northern Marquette County should existing routes be closed in an emergency.

Woodland Road will also serve an important purpose for public access. Of the 22.3 miles of proposed road, 19.2 miles (86% of the route) would be on Commercial Forest (CF) lands enrolled under the Commercial Forest Act. Another 0.9-mile segment is across State of Michigan land, bringing the total land along Woodland Road that is available for recreation to 90% of the route. These privately owned CF lands are open to the public for hunting, fishing, and gathering (e.g. raspberry and blueberry picking).

The US-41 Corridor Advisory Group (in a letter dated November 18, 2009, see Appendices) supports the construction of Woodland Road. Mr. Aaron Johnson, Traffic and Safety Engineer and Corridor Advisory Group Coordinator states, *"This group along with the Michigan Department of Transportation works to ensure the safe, efficient operation of the US-41 corridor in central Marquette County. This group supports the Woodland Road Project due to the benefits of reducing large*

truck traffic on local roads in urbanized areas and on the US-41 corridor. These benefits will mitigate current truck traffic issues which the residents of Marquette City and Marquette Township have asked their community leaders to resolve. The road will reduce truck traffic on the corridor which will improve highway safety and operation for all motorists."

2. The purpose stated in the Application *(to construct a multi-purpose road to connect key industrial, commercial, and recreational areas in northwest Marquette County to US-41)* does not prejudice the other alternatives analyzed.

The basic purpose of the project is to construct a road from Triple A Road to US-41 to safely provide for vehicle travel. The question is, does the project purpose stated in the Application unduly restrict the consideration of alternatives? The three phrases found in the project purpose stated in the Application are discussed in the following three paragraphs.

The term *"multi-purpose"* does not limit the availability of alternatives under consideration. Any road open to public use in the State of Michigan is considered to be "multi-purpose"; i.e. use of the road is not restricted except for load limits, width limits, transportation of hazardous materials, etc. Woodland's members represent the varied interests expecting to make use of the road. Woodland Road will be a multi-purpose road consistent with the existing activity in the area and the expressed needs of the LLC's members.

The phrase "*connect key industrial, commercial, and recreational areas*" does not restrict the availability of alternatives because the starting point of the proposed road (i.e. the north terminus at Triple A Road and Trail 5) is in an area of industrial activity (e.g. mining), commercial activity (e.g. logging), and recreation (e.g. the north terminus is on State land and is in proximity to hundreds of thousands of acres of land open to public use, either as publicly owned land or land enrolled in the Commercial Forest Act). For purposes of the Application, the north terminus was selected as the starting point. Woodland could have started at the timber mills or Humboldt processing facility and worked backwards. In either event, the alternative routes would be no different.

Finally the phrase "*in northwest Marquette County*" is appropriate because it also does not unduly restrict the consideration or availability of alternatives to the project. The road is proposed in the geographic area of northwest Marquette County and all alternatives are in northwest Marquette County. This area of Marquette County is in need of such a road. The "Transportation Plan for the Proposed Woodland Road" dated August 3, 2009 that was approved by the Board of County Road Commissioners for the County of Marquette reflects that public need. A Transportation Plan was required as part of the process to obtain Board approval for the use of the public road portions of the proposed Woodland Road. A copy of that Transportation Plan is included in the Appendices.

In summary, the proposed Woodland Road is intended to serve much broader purposes than a "haul road". The project purpose as described in the Application appropriately reflects the varied interests of the LLC members and the public and

is stated in plain language. The stated project purpose is an accurate summary of the reasons for the project.

B. Comparison of Impacts

Comments suggest that the Application's comparison of impacts is inadequate. To address those comments, additional information about the comparison of the wetland and stream impacts of each alternative was provided at project meetings with all regulatory agencies on March 31 and April 1, 2010. A detailed comparison of the impacts of the alternatives involved in the proposed project was provided in our letter dated April 9, 2010.

There was also concern expressed that, "The smaller stream crossings are not listed within the Woodland Road Route Alternatives section". This statement is taken from page 35 of the Alternatives Analysis section of the Application and was not meant to say all regulated stream crossings are not described or considered in the Application; it was simply meant to say that the "Region Descriptions" section that follows in the Alternatives Analysis narrative did not discuss every stream crossing in each Region. The "Region Descriptions" portion was only meant to discuss the major stream crossings. All of the stream crossings are included in the tables in the Application and in the project plans and are accounted for.

Using the Wolf Lake Road-Trail 5 route as a starting route for the engineering of the Woodland Road, the route location was revised in order to accommodate the design standards for horizontal and vertical alignments for the 45-mph posted speed. Route changes were also made to avoid wetlands and to make stream crossings at suitable locations at/near existing crossings in most cases. The actual wetland impacts for the proposed Woodland Road route as specified in the Application and subsequent revisions is presently 27.1 acres. Upon final field analysis of the "Porcupine" wetland crossing that is being revised to further avoid and minimize wetland impacts, the wetland impact total for Woodland Road will be further reduced.

All alternatives except the CR 550 alternative have more stream crossings than the proposed Woodland Road. Woodland Road would have the second-fewest impacts on streams of the alternatives considered, both as originally applied for as well as the additional alternatives considered during the application review in coordination with the DNRE.

Overall, the design of Woodland Road through a topographically difficult area of Marquette County characterized by hills, wetlands, and streams has been an engineering challenge. To propose a 22.3-mile road with only 27.1 acres or less of wetland impact in that difficult landscape demonstrates the substantial effort that has been expended to avoid and minimize wetland impacts.

II. Impacts of Project

A. Impacts on Rare Wetland Communities Such as Bogs, Bog Lakes, and Wet Meadows

Your letter suggests that impacts on the quality of aquatic resources is not "appropriately quantified" in the Application. Although bogs and wet meadows are

plant communities identified within the original 300-foot wide study area corridor of the proposed Woodland Road, no bogs or bog lakes are being impacted by the proposed Woodland Road. Impacts to some wet meadow wetlands are unavoidable, with most of those impacts being limited to those along riparian corridors of the major stream crossings.

The Application includes several botanical surveys conducted by King & MacGregor Environmental, Inc. (KME) at various seasons of the year along the original, approximately 300-foot wide, corridor of the proposed Woodland Road from 2005 through 2008. KME botanists conducted the surveys utilizing standard botanical survey techniques. A comprehensive list of plant species in the proposed road corridor was compiled by KME and included in the Application. No federally listed species were identified. The only species listed by the State of Michigan that was found in the road corridor is *Gentiana linearis* (narrow-leaved gentian), which is listed as a threatened species. Therefore, a permit application to relocate the narrow-leaved gentian is currently pending with the Wildlife Division of the DNRE.

In addition, KME will be conducting an assessment of the functions of the wetlands proposed for impact using the Michigan Rapid Assessment Methodology (MiRAM) within the next three weeks. The results of that assessment will be provided to you prior to May 7, 2010.

B. Impacts of the Trail 5 Relocation

We have been advised by the regulatory agencies that the impacts associated with the snowmobile Trail 5 relocation must be included in the impacts analysis. Wetland and stream impacts associated with the relocation of Trail 5 were determined after the submittal of the Application. The applicant for that permit will be the Moose Country Snowmobile Club. Moose Country has recently been working on the Trail 5 relocation plans and has prepared draft permit application documents for a trail relocation permit, including project plans. They have secured the approval of all landowners on the relocated portion of the trail.

Prior to the submittal of a wetland/stream permit application, the DNRE Forest Management Division must first approve the trail relocation plan. When the Forest Management Division approves the plans according to its regulations, Moose Country will be able to file the wetland/stream permit application to the DNRE Land and Water Management Division. The application will include minor wetland fill, three bridges, and three culverts. We understand the wetland impacts of the proposed relocation are only 0.25 acre, including temporary and permanent wetland impacts.

C. Indirect Wetland Impacts

We have also been asked to provide a more detailed discussion of indirect impacts on wetlands along the road corridor. Our response regarding indirect impacts is as follows:

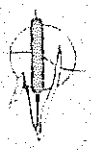
1. Significant wetland fill areas

Concern was expressed in comments about the placement of "significant fill (greater than 10 feet) or excavation (greater than 5 feet) from the original ground elevation in wetlands". The wetland fill and excavation areas that meet these criteria are identified below in Table 1.

TABLE 1. Wetlands with >10' of Fill or >5' of Muck Excavation.

Station	Wetland	Estimated Fill Length
211+00	S5	400'
236+00	S2	250'
376+00	A60	400'
410+75	A58	250'
465+00	C2	200'
496+00	B44	150'
523+50	B50	100'
562+00	A37	100'
701+75	E23	100'
706+50	E23	100'
724+00	E23	100'
756+00	E21	300'
845+00	E9	100'
876+00	E2	200'
889+50	E1	200'
898+50	AA6	300'
915+00	AA7	200'
924+50	A10	200'
945+00	A12	300'
976+00	A15	100'
981+75	A15	50'
990+00	A16	150'
1016+00	B40	300'
1031+00	B36	300'
1068+25	B33	100'
1104+50	B9	200'
1120+00	B7	75'
1137+00	B1	150'
1188+00	M11	200'
1223+00	L2	1,000'
Totals	**30**	**6,675'**

The road construction specifications require the use of MDOT Class III fill in these areas, which is fill that has good hydraulic conductivity intended to pass groundwater flows at least as easily as the muck/peat soils that the fill replaces. We are proposing a different type of fill to be included in the typical cross section of fill in these areas in an effort to ensure minimal interruption of groundwater flow. Figure 2 depicts the typical placement of a layer of rock from the existing ground surface down to a depth of three feet. The rock fill layer would be as wide as the granular fill and would be at least 50% of the length of the wetland crossing and centered on the length of the wetland crossing. A layer of geotextile fabric would be placed on the top of the rock fill to protect the interstitial spaces in the rock from the road fill above.



This type of construction is intended to not impede groundwater through the road fill sections; i.e. the road fill will not dam up any groundwater, thereby minimizing any secondary effects on wetland vegetation or other wetland functions.

In addition, one proposed wetland crossing location that has been a particular concern of the DNRE has been what the review team has called the "Porcupine Wetland". (This is a name that was given to this location due to the fact that a porcupine was seen there during field planning for the road.) During recent re-evaluation of this crossing location conducted for the purpose of trying to minimize wetland impacts, a potential road reroute that would reduce wetland impacts in the Porcupine Wetland was discovered.

The potential reroute is located about 600 feet east of the crossing location proposed in the Application at a place where the wetland narrows substantially. The applicant will be proposing this revision to the DNRE as soon as plans are completed. Additional wetland delineation field work in this area was done April 14, 2010, and the plans are currently being revised.

A stream is located in the Porcupine Wetland where the new crossing is proposed. In order to avoid wetland and stream impacts from the proposed road and to provide for a wildlife travel corridor under the road in this wetland, a 53-foot clear span box beam bridge will be proposed at the stream/wetland crossing. This bridge will add additional cost to the wetland crossing, but will address both direct and indirect wetland impacts as well as wildlife travel at this location.

The initial Application proposed 3.14 acres of wetland impact at the Porcupine Wetland crossing. A January 20, 2010 revised plan reduced the wetland impacts to 2.7 acres of wetland fill. The new location for the road crossing will further reduce the wetland impact to approximately 2.3 acres, but the exact impact will not be known until the revised plans are completed. This revision to the Application would also add an additional stream crossing to the proposed Woodland Road, and would therefore bring the total stream crossings to 24.

2. Increased runoff

A sub-watershed analysis was conducted by AL&S after the general route had been selected for the proposed road. The purpose of this work was to ensure that seasonal overland runoff would follow its normal course and minimize potential for erosion and wetland/stream impacts.

Using existing topographic maps, AL&S civil engineers determined the areas of sub-watersheds that drained to or across the proposed road, as well as the flow direction and runoff volumes to be expected from each sub-watershed. Although the MDOT Design Manual indicates that 25-year frequency storm events are appropriate for runoff in undeveloped areas, the 100-year frequency event was used for the Woodland Road design.

Discharges were calculated using the WinTR-55 Small Watershed Hydrology Computer Model®. The HY-8 Culvert Analysis Model® was used to determine the appropriate size of culverts. These calculations were conducted for the 93 culverts that have been proposed to maintain these existing runoff patterns for the Woodland Road, in addition to the 23 stream crossings (24, including the new Porcupine Wetland reroute).

As a result of the sub-watershed planning described above combined with the hydraulic calculations done on the 23/24 regulated stream crossings, Woodland expects that runoff will be unimpeded and runoff volumes will not be substantially increased over existing conditions as a result of the construction of the Woodland Road.

3. Introduction of pollutants from vehicular traffic

Drips of oil and grease, particulate depositions from vehicle exhaust, and potential spills of fuels and materials being transported on roadways are all potential detrimental effects of vehicular travel on any roadway. However, these pollutants are not usually a single causative effect of water pollution or detrimental impacts to wetlands adjacent to roadways. The risk on Woodland Road is no different than that on all alternative routes. When traffic accidents occur, hazardous materials are handled in the appropriate manner and secondary effects from these accidents are usually minor. Therefore we are of the opinion that this factor should not be a major concern with the proposed Woodland Road.

Greenhouse gas emissions are an important issue. In an "Endangerment Finding" issued on December 7, 2009, the EPA made a ruling that greenhouse gases pose a threat to human health. The consideration of greenhouse gas emissions by EPA for the various alternatives would seem to have merit in the review of the public interest of the proposed Woodland Road.

Woodland has calculated the likely emissions from the operation of mine trucks. Information regarding those emissions are included in the Application. The number of truckloads to and from the mine per day is a relative known, as is the type of new trucks that will be used to transport ore from the Eagle Mine. As for logging, due to the wide array of trucks and other equipment used for that purpose in the area and the varied number of loads hauled annually, calculations of emissions associated with logging were not made. However, calculations for mine trucks were performed to provide a relative comparison of the emissions associated with the various alternative routes studied for the Application.

The fact that the proposed Woodland Road is 38.1 miles shorter than the CR 550 alternative and is 28.9 miles shorter than the CR 510 alternative is significant when considering the reduction of pollutants. Introduction of pollutants from vehicle emissions will be a matter of fact regardless of the alternative selected for this proposed transportation route. For this factor alone, the selection of the shortest route will correspondingly minimize the

introduction of pollutants to the environment; therefore the Woodland Road is the best alternative when considering the "emissions" factor.

4. Pollution related to winter road maintenance

The Woodland Road will be maintained during the winter months to minimize hazardous driving conditions to the extent practicable using normal ice and snow removal methods and materials. The road has been designed to ensure that road runoff does not discharge directly to streams and to properly detain runoff to allow pollutants to settle out according to Best Management Practices. Other road maintenance protocols will be implemented by Woodland as required by DNRE permit conditions.

5. Introduction of development along the proposed road

With the exception of a few parcels of land on Wolf Lake Road (an existing county road) south of Brocky Lake near the south end of the project, the entire proposed Woodland Road is located on timber company property owned by Plum Creek Timber Company (formerly Mead Paper Company), Longyear, and GMO (formerly International Paper Company) and on land owned by KEMC. The timber company landowners own land for the purpose of growing and harvesting timber, as well as ensuring a continuing supply of the type and quality of timber needed for their markets and mills. Introduction of any substantial amount of development by these landowners is highly unlikely. This is an isolated geographical area that is not experiencing significant development pressure. It is an area best suited for natural resource development and recreation.

The timber company properties are enrolled in the Commercial Forest Act (CFA), first enacted as Public Act 94 of 1925, for the purpose of obtaining reduction in property taxes for property being used to grow and harvest timber. Development or sale of the property may impose tax penalties on the present owner, which is a strong incentive for the timber companies to not develop the land.

6. Introduction of invasive species to wetlands bordering the proposed road

Introduction of invasive species by vehicles to wetlands along the proposed Woodland Road is always possible, as it is with any of the alternatives discussed. If the DNRE proposes a draft permit condition to have the wetlands evaluated to identify any invasive species that may become established, Woodland would consider such a permit requirement.

7. Future mining and land-use alteration within the region which may be facilitated by the proposed Woodland Road

Because a high percentage of the land in the general area to be served by the proposed Woodland Road is owned by timber companies (along with the U.S. Government and the State of Michigan) any substantial "land-

use" alteration will almost certainly be limited to harvest of timber. Timber companies and the governmental owners operate on long-term plans to harvest and grow replacement timber. Those plans are not easily changed. At this point in time, additional mining activity in the area served by the proposed Woodland Road is very speculative and cannot be reasonably quantified. If other roads that involve wetlands or stream impacts are proposed by the property owners to be constructed or upgraded to connect to Woodland Road, permits would be required and appropriate agency decisions would be made on these proposed activities at that point in time.

Mining in northwest Marquette County, either by KEMC or a number of other mining companies, would not be "facilitated" by the Woodland Road. The recently approved Eagle Mine will proceed with or without Woodland Road. If other metallic mineral resources are discovered in the region and those resources are determined to be economically available and permits are issued, then additional mining is likely to occur. Road access will be just one factor in the mine planning. However, this issue is too speculative to meaningfully evaluate. In summary, the construction of Woodland Road would not be the cause of future land-use conversion other than is inevitable, given the land ownership of the area.

D. U.S. Fish & Wildlife Service Concerns Regarding Migratory Birds and Possible Impacts to Listed Species

KME has communicated with the U.S. Fish & Wildlife Service ("F&WS") in regard to possible draft permit conditions to address potential impacts to listed species (i.e. Kirtland's warbler, gray wolf, and Canada lynx). Woodland is willing to coordinate with the F&WS on permit conditions for these species. Discussions have been ongoing with DNRE Wildlife Division staff regarding mitigation measures for the Woodland Road such as signage, reduced speed limits in critical areas, mortality surveys, and other actions to address wildlife-related issues.

III. Consideration of Other Alternatives for Providing a Route to Connect Triple A Road and US-41

In addition to the preceding summary of the comparison of the impacts of the alternatives involved in this proposed project, additional discussion concerning the Wolf Lake Road South alternative, the CR 550 alternative, and the CR 510 alternative are provided in the following sections.

A. Wolf Lake Road South Alternative

This is an alternative to the south segment of the proposed Woodland Road from US-41 approximately three miles north on Wolf Lake Road. The assessment of this alternative that was previously provided to the DNRE is included in the Appendices to this document.

B. Alternative 2: County Road 550 Alternative

Alternative 2, the County Road 550 ("CR 550") alternative, has less wetland and stream impact than the proposed Woodland Road. However, the CR 550

alternative is not practicable in light of the overall project purposes, i.e., serving the varied needs of the several LLC members' interests as well as the public interest. In addition, there are substantial public interest factors as well as environmental and economic factors that make the CR 550 alternative not a practicable alternative.

The term "practicable" is defined in the 404(b) (1) Guidelines as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project purposes." The CR 550 alternative is "available", although there are some longstanding issues with trucking through the City of Marquette. The CR 550 alternative is also "capable of being done". However, there are significant issues with the *practicability* of this alternative.

The CR 550 alternative is not practicable for the following reasons:

1. The CR 550 alternative does not satisfy the stated project purpose of connecting key industrial, commercial, and recreational areas in northwest Marquette County to US-41.

   The stated project purpose of connecting key industrial, commercial, and recreational areas in northwest Marquette County to US-41 cannot be accomplished with the CR 550 alternative due to the fact that lands within the Project Service Area that are located north of the Dead River (including the Yellow Dog Plains) would not be connected to US-41. The proposed Woodland Road connecting the lands of the Yellow Dog Plains and south to US-41 accomplishes the project purpose in a straightforward manner. Connecting only parts of the Project Service Area to US-41, with the north portion only being connected via the 38-mile longer CR 550 route than would be provided by the Woodland Road, and the lack of any connection to US-41 for those lands generally north of the Dead River, does not meet the project purpose. This fact is best illustrated by the statement provided at the DNRE public hearing on February 10, 2010 on behalf of J.M. Longyear (Longyear), a major landowner in northern Marquette County. The Woodland Road is extremely important to Longyear. The statement is provided below:

   Mr. Art Abramson, Forest Lands Manager for Longyear presented the following statement at the DNRE public hearing, *"Longyear is a major landowner in northern Marquette County and has been for over a hundred years. A major portion of our business is continued long-term sustainable harvest of timber and we supply wood to major customers throughout the U.P., northern Wisconsin, and across the lake states region. In the area of northern Marquette County that this (road) would serve we operate six to eight logging crews on a nearly year-round basis. They're served by another six to eight trucking companies. This represents probably 30-plus full-time jobs. The Woodland Road would provide a significant improvement as an alternative route for transporting these wood products to markets. It could shift approximately a half to two-thirds of our hauling on an annual basis from County Road 550 to a route which avoids the City of Marquette, which avoids residential areas. It will have a significant cost savings, a significant energy savings, and has been pointed out a*

significant reduction in greenhouse gasses contributed to the environment.....So Longyear supports this project as a major opportunity to redistribute hauling and significantly reduce haul distance, move a significant portion of this traffic to a route that is in less conflict with traffic other than truck traffic, and move traffic away from major residential areas."

2. The use of the CR 550 alternative is opposed by many private landowners along the route, local governmental units, the City of Marquette (through which portions of this route pass), and regional business interests.

   The use of CR 550 as an alternative to the proposed Woodland Road is opposed by a diverse local coalition of people and organizations. Many of the reasons for the opposition to CR 550 were presented at the public hearing held by the DNRE on February 10, 2010.

   In addition to the direct testimony at the public hearing, many letters, petitions, and other communication regarding support for the Woodland Road and/or opposition to the use of CR 550 for substantial additional traffic have been provided in the Appendices to this response. These items include the following:

   - A petition signed by 900 people opposing the use of CR 550 or CR 510 for transporting ore from Eagle Mine;
   - Letters from the City of Marquette, City of Ishpeming, and City of Negaunee supporting the Woodland Road;
   - Letters from Negaunee Township, Ishpeming Township, and Champion Township supporting the construction of Woodland Road;
   - A letter from the Board of County Road Commissioners of the County of Marquette supporting the construction of Woodland Road as a needed transportation alternative to the CR 550 route.

3. Continued use of the CR 550 route will not address the ongoing timber transportation issues, which is the reason that the Michigan Forest Products Council became a member of the Woodland Road LLC to propose the construction of the Woodland Road. Continued use of the CR 550 route also does not address the expressed needs of the timber companies that have provided land access for the construction of the Woodland Road.

   Timber transportation logistics are significantly affected by the use of CR 550 as an alternative route to the proposed Woodland Road. As defined in the Alternatives Analysis[2], the CR 550 route adds 38 miles to the transportation route, one way. For hauling of ore from Eagle Mine alone, the CR 550 route would add 1.4 million miles of truck travel *per year* as compared to the Woodland Road route. This is a significant logistical

[2] DNRE Application for Permit Alternatives Analysis, Figure 1, page 4.

burden for the mining industry and the timber industry in the region and would result in significant public expenditures for maintenance of the CR 550 route by the City of Marquette and Marquette County Road Commission. The Road Commission specifically addresses the road maintenance issue on page two, paragraph three of its April 12, 2010 letter.

Logging is an important component of the economy and heritage of the western Upper Peninsula of Michigan. As shown in the Alternatives Analysis[3], most timber company markets are located west and south of the Project Service Area. An adaptation of Figure 3 from the Alternatives Analysis is provided in Figure 1. Use of CR 550 for transportation of timber is highly inefficient and actually results in lower costs paid to private landowners for timber. The existing poor road access results in lower income for loggers and trucking companies due to the logistical problems with getting timber to market destinations. The poor condition of existing roads is very hard on equipment, which increases operational costs. If road access was improved, then more loads of timber could be hauled per day and all parties involved will benefit.

4. The CR 550 route will result in the release of greenhouse gas emissions in areas of dense residential development, education institutions (i.e. the route passes through Northern Michigan University), and commercial establishments on a route that is 38 miles longer one way than the proposed Woodland Road. Emissions on CR 550 just for mine trucks would be more than double compared to the Woodland Road[4]. Emissions on Woodland Road would be in sparsely developed areas and on a route that is only 22.3 miles in length compared to the CR 550 route which is 60.4 miles in length.

5. There was concern about the potential introduction of pollutants from vehicular traffic. Although these pollutants are not identified, it makes sense that if one can expect pollution from vehicles to be greater on the proposed route, a substantially longer route will be even a greater source of potential pollution.

6. A similar comparison can be made to pollution from vehicles as addressed in the preceding paragraph with the loss of ore from the trucks transporting ore from the Eagle Mine to Humboldt Mill. KEMC will take every precaution with the design of trucks and operating procedures to prevent the release of any ore or dust from trucks, but if the Corps and EPA expect the release of ore or dust from trucks as stated, then a substantially longer route through densely developed areas would not seem to be as practicable as the shorter proposed route in an undeveloped area.

7. When considering the safety of directing a substantial number of large trucks on the 38-mile longer CR 550 alternative route through areas of

[3] Alternatives Analysis for Woodland Road Application for Permit, pages 8-11, Table 1, Figure3.

[4] Alternatives Analysis for Woodland Road Application for Permit, Table 2, page 34.

development and heavy traffic compared to having the trucks on Woodland Road, it is understandable that there is a proportionately higher statistical risk of accidents, release of fuel, and personal injury associated with the longer route. The additional 1.4 million miles of mine truck traffic, if the CR 550 route is required, would mean more traffic issues and accidents, not considering all of the logging trucks, aggregate trucks, construction traffic, employees, contractors, and other traffic that would use this longer route. US-41 currently carries 37,000 vehicles per day, as measured at the traffic signal at the Target/Walmart intersection. Substantial truck traffic mixed with this volume of traffic would be problematic.

The University of Michigan Transportation Research Institute's Center for National Truck and Bus Statistics has provided national accident survey data since 1980. Statistics regarding accidents involving trucks provide information that should be considered in this case, one of which being that about 80% of truck accidents are caused by drivers of other vehicles involved. Another fact is that when trucks are involved in accidents, damages are more substantial and injuries to the other vehicle occupants involved are usually more severe. The point here is that statistics bear the fact that routing this truck traffic through the City of Marquette, Negaunee, and Ishpeming will result in more accidents, and most of those accidents will not be caused by trucks.

Considering the preceding discussions about greenhouse gas emissions, introduction of pollutants, alleged release of ore or dust from trucks as well as safety issues, the simple fact that mine trucks alone would travel 1.4 million miles per year more if required to use the CR 550 route compared to the proposed Woodland Road would lead to a conclusion that the CR 550 alternative route is not practicable.

In summary, the CR 550 alternative is not a practicable route compared to the Woodland Road relative to the project's stated purpose. If LLC member KEMC's interests were the only interests at stake it may be different, but the CR 550 route is not practicable to effectuate the broader purpose of the road. Increased usage of CR 550 by the timber industry to both service the biofuel sector, as well as their current usage along with use by KEMC if Woodland Road is not approved, will further impact existing infrastructure in a manner that will result in substantial logistical impediments to economic growth. The Woodland Road has the added substantial public benefit of addressing long-standing public concerns about existing truck traffic on CR 550, as is stated by the letters from local governments and Board of County Road Commissioners for Marquette County that have been provided.

C. CR 510 Alternative

The CR 510 alternative has been analyzed thoroughly in the preparation of the application for permit. The CR 510 route is 51.2 miles in length, only 9.2 miles shorter than the CR 550 alternative and 28.9 miles longer than the proposed Woodland Road. The CR 510 alternative has 10.2 acres of projected wetland impact using the methodology described in the above-referenced April 9, 2010, as well as 29 stream crossings.

CR 510 has substantial length that would require reconstruction due to inadequate road width, alignment, or poor road base. There have been ongoing issues with soil erosion from CR 510 into the adjacent streams. In fact, enforcement actions have been taken by the former Department of Environmental Quality (DEQ), and funding has been provided by DEQ to remediate some of the erosion trouble spots over the past years. Documentation of some of these actions is provided in the appendices to this response. As stated in the April 12, 2010 letter from Board of County Road Commissioners for Marquette County, starting with the last sentence on page one, *"The DNRE and the Road Commission have been working together over the last 15 years for ways to solve, mitigate, reduce and or eliminate the environmental challenges that are present along CR 510 both in regards to reconstruction and maintenance."*

The combination of wetland and stream impacts described above makes it not practicable to utilize CR 510 compared to the proposed Woodland Road alternative. In addition, the CR 510 alternative shares many of the same public interest concerns with the CR 550 alternative route and does not meet the project purpose.

IV. Stream and Wetland Mitigation

A. Stream Mitigation

Comments indicate that the applicant has not proposed compensatory mitigation for stream impacts. An extensive amount of stream evaluation has been performed in order to determine the least impacting design of the road crossings of each stream. In addition, mitigation measures have been proposed as a part of the project design in an effort to ensure that the proposed stream crossings have minimal negative effects on stream resources. These evaluation and mitigation efforts include:

- Stream surveys were conducted to determine baseline ecological condition and fisheries resources in the streams.
- Surveys were conducted to ensure that flow velocities are acceptable for all structures, even during flood events.
- HEC-RAS modeling was conducted to ensure that flood waters are adequately passed through structures during runoff events up to the 100-year frequency flood event.
- Streams were analyzed using the "MESBOAC" methodology to determine the size of stream crossing structures and their placement to ensure that the structure has minimal impact on the streambed, on stream flow, and provides area in-structure to allow fish and wildlife to pass through the structure.
- KME has been coordinating with the DNRE Fisheries personnel since the filing of the application for permit in an effort to minimize any negative effects on streams. Woodland is open to sizing structures as requested by the DNRE.

- Clear span bridges are proposed over the six largest stream crossings to ensure that there are no direct impacts from the crossing of those streams. The revision of the route around the "porcupine" wetland would add another clear-span bridge.

- Seven existing stream crossings that are in portions of the existing roads that will be abandoned as a result of the construction of Woodland Road are proposed to be removed, and streambanks restored as a component of the stream mitigation plan.

- Existing stream crossing structures over Trembath Lake Creek, Grapevine Road Creek, Conners Creek tributary, Voelkers Creek tributary, Voelkers Creek, Dead River, Mulligan Creek tributary, Mulligan Creek, and Yellow Dog River will be removed (many of which are currently inadequately sized and therefore negatively impact the streams) and will be replaced with properly sized and designed structures.

- There are only four new stream crossing locations on the proposed Woodland Road (Middle Branch Escanaba River, Second River, Koops Creek, and Mulligan Creek). All four of these crossings will be spanned with bridges or Conspan® structures to minimize any impacts to these streams.

- Preservation of about 1,000 feet of the upper Salmon Trout River and adjacent wetlands and uplands in the riparian corridor is proposed in the application for permit, as both wetland and stream mitigation.

B. A Possible Plan for Significant Preservation as an Alternative Proposal for Project Mitigation.

Although this preservation plan is still in the formative stages, there has been a preliminary commitment by Woodland Road LLC, Plum Creek, and Longyear to impose a Conservation Easement on a significant amount of high quality stream and wetland along the Yellow Dog River. The plan calls for preservation of 1,280 acres of land presently owned by Plum Creek, KEMC, and Longyear, which includes 6.4 miles of the Yellow Dog River, 1.5 miles of tributary streams, and 900 acres of wetland. This plan is being considered to provide mitigation for habitat fragmentation as well as both wetland and stream mitigation for the Woodland Road. This Yellow Dog River Preservation Area would be contiguous to U.S. government property (McCormick Tract) on the west, and would also border State of Michigan land on the east portions. This significant preservation opportunity will be discussed in more detail as the Application review process moves to conclusion.

The applicant is open to additional stream mitigation measures that may be proposed by DNRE, Fish & Wildlife Service, Corps, or EPA that are commensurate with the perceived direct and indirect impacts to streams that may be caused by the proposed Woodland Road, but it is our position that adequate stream mitigation has been provided in the form of avoidance and minimization of impacts,

compensatory mitigation, and preservation of critical riparian corridors as explained above.

C. Wetland Mitigation

Comments express concerns about the currently proposed wetland mitigation. We will address the concerns of each agency in this response.

The F&WS comments on wetland creation proposed in the application are presented below (in italics) with our response to those comments following.

- *Small, scattered wetlands created in borrow pit areas is unlikely to replace the ecological values associated with the forested, emergent, and scrub-shrub wetlands impacted by the project.*

  Response: There are three mitigation (wetland creation) sites proposed in the Escanaba River watershed. The sites are 1.18 acres (M-1) for the Michigamme River watershed impacts to be mitigated in the adjacent Escanaba River watershed; 9.6 acres (E-1) to mitigate for impacts in the Escanaba River watershed; and 24.02 acres at the Humboldt Wetland Mitigation Bank (HWMB) to mitigate for the balance of the Dead River watershed mitigation, due to the lack of suitable sites in the Dead River watershed.

  There are three mitigation (wetland creation) sites proposed in the Dead River watershed. The sites are 3.5 acres (D-1); 3.0 acres (D-2); and, 4.4 acres (D-3) in size.

  There is one mitigation (wetland creation) site proposed in the Yellow Dog River watershed, which is 7.48 acres in size.

  It is important to note that although some of the wetland creation areas are "small", all of the proposed wetland mitigation sites are directly connected to large existing wetlands and the size of the wetland to be created is not as particularly relevant as it might otherwise be, as it will be part of a much larger wetland.

  The "borrow pit" issue seems to be negatively perceived by the F&WS and the Corps in their comments. The underlying premise for selection of any given proposed mitigation is to create wetlands in areas that have a high likelihood of ecological success. Many potential wetland creation sites were evaluated during the more than two years of planning for this project. Bedrock and deep groundwater tables in many areas, especially in the Dead River watershed, make location of wetland creation sites very difficult. We have only proposed sites that have a high likelihood of ecological success.

  The "practicability" of wetland mitigation sites was also a factor in the evaluation of sites; i.e. the use of overburden for the proposed road construction made the economics of the project much more prudent. Excavating thousands of cubic yards of material that is either unsuitable for

road construction or is located so far from the proposed road that transportation is not economically feasible made many sites not practical as mitigation sites. If mitigation sites are proposed that must be excavated and the excavated material placed on the surrounding landscape, then the impacts to the uplands expands the land-change to the area and would likely be unacceptable to the agencies as well. In addition, the economics of such sites may be not commensurate with the benefits of the site.

The primary prerequisite for selection of the wetland creation sites was that the sites be groundwater-driven hydrology; surface water-fed wetland creation sites are usually problematic and have high failure rates. Expanding existing wetlands with wetland mitigation sites was also desirable due to habitat provided, seed bank, and wildlife benefits. Although the applicant would have preferred one large mitigation site in each watershed, the reality of the situation is that this is not possible. The mitigation site search process involved hundreds of hours of field time and tens of thousands of dollars investigating potential sites with installation of piezometers, surveys, etc.

- *The specific acreage of emergent, scrub-shrub, and forested wetlands identified at each site may not be realistic. An explanation is necessary.....*

  The wetland mitigation plans at this point are conceptual. Once the DNRE/EPA decides that a permit can be issued for the project, then a draft permit can require that complete, detailed wetland mitigation construction plans be provided prior to issuance of the actual permit or prior to the start of any work on the project. All of the details suggested by the F&WS comments regarding these specifics will be provided at the appropriate time in the process.

- *At locations where created wetlands adjoin existing wetlands, impacts to existing wetlands could occur via sub-surface and surface drainage. In these instances, the applicant should implement measures to protect the hydrology of the existing wetlands.*

  As mentioned previously, all of the proposed wetland mitigation sites are adjacent to existing wetlands and all sites are proposed in groundwater-fed situations. Piezometers have been installed in all of the proposed wetland creation areas to document and monitor the groundwater table elevations and fluctuations. There is little or no likelihood that excavating uplands to groundwater tables will affect the overall groundwater tables in these areas and therefore we are of the opinion there will not be any effect on the hydrology of the existing wetlands. Surface and sub-surface drainage will be highly unlikely as a result of the construction of the proposed wetland creation areas, but we will analyze the hydrology as part of the final wetland mitigation plans and we agree to implement measures to protect the hydrology of the existing wetlands.

- *Several wetland creation sites are currently intact forest communities. Conversion of these sites from upland forest to wetland would result in further fragmentation and habitat loss.*

  Creation of wetlands for mitigation inherently requires conversion of some type of upland habitat to wetland. In requiring the creation of wetlands in the sequence of mitigation, land cover is necessarily converted to other types. In the long term, many of the mitigation sites are intended to be forested wetlands.

  The wetland mitigation site in the Yellow Dog River watershed is on land owned by KEMC. The land was purchased from the Davenport Foundation, which reserved the timber rights for a period of five years. It is expected that the Foundation will harvest the timber on that site to realize the appropriate income for which this land has been owned and managed.

  The wetland mitigation sites in the Dead River watershed are on lands owned by Plum Creek Timber Company. The land is also owned and managed for the periodic harvest of timber.

  The wetland mitigation sites in the Escanaba River watershed are owned by Humboldt Wetland Preserve. Site E-1 was logged several years ago. The HWMB site was logged in 2009.

In regard to the Corps comment concerning an "impact analysis" being necessary for them to determine the impacts of the proposed project being compensated, we have coordinated (particularly at our meetings on March 31, 2010 and April 1, 2010) with the EPA, the DNRE, Corps, and F&WS regarding the MiRAM methodology to be used. We will provide additional information when we have completed this task. Due to the extensive baseline ecological surveys that have been conducted in the project area that were provided in the Application Permit, we have a large body of data upon which to base the impact analysis for the proposed Woodland Road.

The wetlands proposed for preservation, as well as those wetlands adjacent to the proposed wetland mitigation sites will be evaluated. Field work will be conducted as late as possible this month in order to provide the requested information prior to May 7, 2010.

D. Compensation by Restoration of Wetlands

The applicant is aware of the preference for restoration of wetlands in the mitigation sequencing. The comments suggest "the applicant must consider other opportunities for wetland restoration". The landscape where the proposed road would be located has had little wetland impact in the past, with the exception of construction of logging roads and landowner access driveways and roads. As presented in the Application, the only opportunities that were found for wetland restoration anywhere near the project area were for removal of the to-be-abandoned road sections that would be cut off by Woodland Road. There were 30 separate areas proposed for removal of road fill in wetlands for a total of 3.52

acres of wetland restoration. The applicant is currently coordinating with the DNRE to determine whether these 30 small wetland restoration sites are feasible.

V. Summary

The comments conclude, "The applicant has not demonstrated that they have avoided and minimized wetland impacts nor would the proposed mitigation compensate for the wetland losses associated with the project". It is our intention to have demonstrated, both in this response to the EPA comments and with subsequent materials to be submitted (if necessary) along with the original permit application documents, that an adequate demonstration of impact avoidance and minimization has been made. In regard to mitigation of impacts, Woodland and its consultants are prepared to work cooperatively with the DNRE and EPA to formulate a mitigation package that exceeds the requirements for compensating the unavoidable impacts to regulated resources. We are fully open to ideas and requirements. This project is of such critical importance to the long-term economic health of this region of Michigan that such a commitment is necessary.

The summary also states, "The project, as proposed, would result in significant degradation of the aquatic ecosystem by directly impacting 23 streams and 27.1 wetland acres, which include rare wetland types and high quality habitat." Woodland, however is of the opinion that substantial efforts have been made to avoid and minimize impacts to the greatest practicable extent, and that "significant degradation of the aquatic system" will not occur due to the measures that have been taken to minimize impacts, such as:

- Clear span of six major streams;
- Sizing of stream culverts according to state-of-the-art methodology;
- Minimizing wetland impacts with road design and construction methods;
- Designing the road to a 45 mph maximum speed, with many areas of 30 mph, in order to avoid and minimize wetland impacts;
- Routing the road to the extent possible on existing roads to minimize impacts to undisturbed areas.

There are unavoidable impacts due to the project, but in balancing the unavoidable detriments of the project with the strong public benefits of the project, the impacts will hopefully be determined to be acceptable and then mitigation can be provided to offset the unavoidable impacts. We respectfully submit that the public interests involved in this proposed road and the long-term economic benefits of the project will be sufficient to have you determine that the proposed Woodland Road is the most practicable alternative. We will continue to work diligently with EPA and DNRE with the goal of providing any additional information needed to remove your outstanding objection to issuance of the DNRE permit for this project.

Thank you for considering our response to your comments. We look forward to continuing to work with you in the coming days and weeks to resolve the expressed concerns before the DNRE processing deadline of May 14, 2010.

Sincerely,

For

King & MacGregor Environmental, Inc.
Charles L. Welverton
Project Manager for Woodland Road LLC Application for Permit

Enclosures

cc: Colleen O'Keefe, DNRE
Cary Gustafson, DNRE
Mike Smolinski, DNRE
David Gordon, F&WS
Christie Deloria, F&WS
John Konik, Corps of Engineers
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Woodland Road LLC